



2019 Artificial Intelligence Bootcamp Tentative Schedule

19-24 November 2019

Tuesday 19 November 2019: Welcome Session

Time	Focus/Speakers	Topic
3-4:00	Welcome Refreshment and Registration	
4:00-5:30	Welcome session, Camp Rules and Welcome Masterclass by Prof Thomas Dietterich, BigML's Chief Scientist & Emeritus Professor of Computer Science at Oregon State University.	Robust Artificial Intelligence and Trustworthy Machine Learning
5:30-6:00	Welcome Quiz and wins	
6:00-7:00	Terragon Group Masterclass on AI emerging trends Babatunde Adeniran & Esemeje Omole Data Scientists, Terragon Group, Nigeria	Masterclass on Emerging Trends in Machine Learning/Artificial Intelligence in the business space
7:00-8:00	Dinner and check-in into rooms	

Wednesday 20 November 2019: Tools, Concepts and Frameworks

Time	Focus/Speakers	Topic
8-8:30	Breakfast	
8:30-9:30	Alina Game , GRID3 Nigeria Data Analyst Edith Darin , GRID3 Nigeria Researcher Emilie Schnarr , GRID3 Nigeria Manager Jolynn Schmidt , GRID3 Nigeria Programme and Data Analyst Michael Harper , GRID3 Nigeria Data Analyst Wole Ademola Adewole , GRID3 Nigeria GIS Consultant Sophie Delaporte , Flowminder UK	Introduction to Geospatial Data Analytics with GRID3
9:30-11:30	PARALLEL SESSION – different topics in different classes based on participants' level and interest Basic Tool Mastery: Quick run through, short cuts and fast-track expert knowledge	
	Robert John , Chief Data Scientist, EnterFive	Tensorflow
	Blessing Oladeji , CEO, Octave Analytics	SQL
	Wuraola Oyewusi , Research Lead, Data Science Nigeria	Jupyter/Python
11:30am-1:30pm	PARALLEL SESSION – different topics in different classes based on participants' level and interest Conceptual Exploration of Maths for Machine and Deep Learning	
	Maths and Concepts in Machine Learning: Samuel Edet , Doctoral Researcher, Economics, Networks and Business Analytics at IMT School for Advanced Studies, Italy	ML - Defining a Model Cost / Loss / Error Function, Mathematical Optimization, Gradient Descent, Stochastic Gradient Descent etc.
	Maths and Concepts in Deep Learning: Dr Stephen Odaibo , CEO/Founder Retina-AI, Houston, USA	DL: Introduction to Deep Learning, Core Maths concepts, Common Activation Functions, Deep Neural Network, Forward and Back-Propagation etc.
2-5	PARALLEL SESSION – different topics in different classes based on participants' level and interest Hands-on Machine Learning and Deep Learning via mini-projects	
	Samuel Edet , Doctoral Researcher, Economics, Networks and Business Analytics at IMT School for Advanced Studies, Italy & band Ku Leuven, Belgium	Key Concepts in Machine Learning
	Dr Stephen Odaibo , CEO/Founder Retina-AI, Houston, USA	Key Concepts in Deep Learning

5-6	<p>Women in AI Session</p> <p><i>Dr Sakinat Folorunso, Computer Science Lecturer/Researcher, OOU & Lead for WIDS</i></p>	
6-7	<p><i>Daily Book Prize wins</i></p> <p>Industry Engagement Session</p> <p><i>Uzo Mkpuru HCIB, Assistant Vice President/Group Head, CRM, Customer Analytics & Insights, First City Monument Bank Limited</i></p>	What industries are looking for in a Data Scientist
7-8	Dinner	
8-9	<p>Masterclass on Artificial Intelligence Engineering</p> <p><i>Prof Kunle Olukotun, Professor of Electrical Engineering and Computer Science at Stanford University and Director of the Pervasive Parallelism Laboratory, USA. Founder of Mines.io</i></p>	Future Computer Systems for Software 2.0

Thursday 21 November 2019: Theoretical Depth and Exploration

Time	Focus/Speakers	Topic
8-8:30	Breakfast	
8:30-9:30	Sabrina Smai, Software Engineer – Microsoft, Canada Problem-solving and Solution Approach in Artificial Intelligence	
9:30-11:00	PARALLEL SESSION – different topics in different classes based on participants' level and interest Practical AI in use	
	Elaine Nsoesie PhD, Assistant Professor at Boston University School of Public Health/ Institute for Health metrics and Evaluation, Boston, USA	Artificial Intelligence for Health - use for non-traditional data for health risk prediction
	Pascal G. Bernard, Head of Data Science, CARBON/ One Finance & Investment Ltd., London	Artificial Intelligence for Financial Inclusion
	Jacobo Varela, Data Scientist, CARBON/ One Finance & Investment Ltd., London	9-10: Alternative Data and Risk Prediction 10-11: Graph Databases: A key to addressing Financial Services challenges.
	Margaryta Ostapchuk, Technical Evangelist, Commercial Software Engineering team, Microsoft Canada	Cognitive Solutions Development in Microsoft Azure
11am-3:00pm	PARALLEL SESSION – different topics in different classes based on participants' level and interest PARALLEL SESSIONS ON AI THEORIES IN PRACTICE	
	(1) Anomaly Detection with BigML - theory and application Prof Thomas Dietterich and Guillem Vidal	
	(2) Computer Vision CNN: Convolutional Neural Networks Dr Emmanuel Doro, Director, Data Science at Walmart, USA	
	(3) Natural Language Processing: Kathleen Siminyu, AI for Development Network, Kenya & Ayodele Olabiyi, Product Researcher and NLP Project Lead, Data Science Nigeria & Wuraola Oyewusi, Research/Innovation Lead, Data Science Nigeria	

4:00-5:30	PARALLEL SESSION – different topics in different classes based on participants' level and interest	
	AI PhD Research or Running an AI-first start-up	
	<i>Kris Sankaran PhD</i> , postdoc at MILA, Montreal, Canada & <i>Elaine Nsoesie PhD</i> , Assistant Professor at Boston University School of Public Health/ Institute for Health metrics and Evaluation	Writing scientific Research paper and PhD readiness
	<i>Osayi Igharo</i> , Managing partner, Ripple VC, USA <i>Wale Akanbi</i> , Co-Founder & CTO - Aella Credit, Nigeria	Pitching ideas & running an AI Start-up
6-7	<i>Masterclass with Dr Stephen Odaibo</i> , CEO/Founder Retina-AI, Houston, USA	Generative Adversarial Network – Key concepts
	<i>Meet-Up on the Nigeria Natural Language agenda setting</i> as part of https://Masakhane.io <i>Kathleen Siminyu</i> , AI for Development Network, Kenya & <i>Ayodele Olabiyi</i> , Product Researcher and NLP Project Lead, Data Science Nigeria & <i>Wuraola Oyewusi</i> , Research/Innovation Lead, Data Science Nigeria	Agenda-setting for Nigeria NLP workstream
7-8	Dinner	
8-9	Masterclass on Artificial Intelligence At Scale <i>Anima Anandkumar</i> , Professor of Computing at California Institute of Technology & Director of Machine Learning research at NVIDIA	Trinity of AI (Data, Cloud, Algorithm) - imperatives of AI at scale

Friday 22 November 2019: Real-world Application Enablers and Use cases

Time	Focus/Speakers	Topic
7:30-8:00	Breakfast	
8:00-9:00	Research Best practice: Kris Sankaran PhD , <i>postdoc at MILA, Montreal, Canada</i>	Advanced Deep Learning and Humanitarian AI (Bayesian Deep Learning) and applications.
9:00-10:00	Eric Sodomka PhD , Research Scientist, Facebook Research	Introduction to Mechanism Design
10am to 3:30pm	PARALLEL SESSION – different topics in different classes based on participants' level and interest Methodologies for real-world application	
	Eric Sodomka PhD , Research Scientist, Facebook Research	Introduction to Mechanism Design
	Geospatial Analytics for Nigeria GRID3 team	GRID3 for GeoSpatial Analytics for Nigeria
	Machine Learning best practices for Digital Media and Programmatic Advertising Analytics Mohit Rawan Terragon Dial-in session	Project-based immersion into Machine Learning best practices for Digital Media and Programmatic Advertising Analytics
4:00-5:30pm	Open House: Building a world-class career in AI & Data Science Dumebi Okwechime PhD , <i>Chief Decision Scientist – Renmoney, Lagos</i> Nicholas Litombe PhD , <i>Senior Data Scientist at Unacast, USA</i> Margaryta Ostapchuk , <i>Technical Evangelist, Commercial Software Engineering team, Microsoft Canada</i> Sabrina Smai , <i>Software Engineer – Microsoft, Canada</i>	
5:30-7:00pm	Introducing Malaria competition and dataset (24 hour Hackathon) Prof Delmiro Fernandez-Reyes <i>Reader in Digital Health, University College London Hackathon break and work</i> <i>Introduction to the Insurance Dataset for recruitment by Axa Mansard</i> <i>Introduction to the Max.ng Challenge</i>	

7-8pm	Dinner	
8-12pm	Hackathon Individual work session	

Saturday 23 November 2019: Real-world Application Enablers and Use cases

Time	Focus/Speakers	Topic
8-8:30	Breakfast	
8:30- 9:30	Artificial Intelligence for Good AI Poster session	
9:30-11am	Statistical Best practice Masterclass <i>Kris Sankaran PhD, postdoc at MILA, Montreal, Canada</i> <i>Nicholas Litombe PhD, Senior Data Scientist at Unacast, USA</i>	
11-1pm	Deep Learning with Microsoft Azure <i>Dr Nnanna Orieko, Cloud Solution Architect Data and AI at Microsoft</i> <i>Margaryta Ostapchuk, Technical Evangelist, Commercial Software Engineering team, Microsoft Canada</i> <i>Sabrina Smai, Software Engineer – Microsoft, Canada</i>	
1-4pm	Hackathon focus	
4-6pm	Recording of Intercampus AI competition	
6-7	Award Night/Dinner	

Sunday AM: Departure

Awards

- Softcom Eyowo Daily Quiz Book Prize
- Microsoft Best Student in Deep Learning application via the Malaria Hackathon - use of Data to solve social problems
- Bluechip Technologies - Best students in InterCampus Machine Learning competition
- Terragon Mr. and Mrs Algorithm & Best School on the Leaderboard
- Retina-AI Best Poster on Artificial Intelligence for Social Good
- MainOne Best Female Data Scientist
- Axa Mansard - 3 Best student in special insurance hackathon for internship
- Xlytics Innovation Award for community - promotion of DSN and campus ambassadors, community leaders and volunteers
- Carbon/OneFi Award for Industry Support and Promotion of DSN